



Stem Cells @ UCR

Stem Cell Center Newsletter – Mar 2024, No. 11

***NEW* Annual Award for Best Stem Cell Publication!**

- **Apply now!** Applicants must be UCR Graduate Students or Postdocs and be first author on the publication.
- The article must include stem cells.
- Submitted articles must be published or in press between January 2022 – May 2024.
- 1. **Submit your publication and supplementary files to Rachel Behar (rbeha001@ucr.edu)**
- 2. **Include with your submission a cover letter that highlights the significance of the paper.**
- 3. **The subject of the email should be: “Submission for the Annual Award for Best Stem Cell Publication”**
- The winner will receive a prize worth \$1000.

What's Inside

Publication Award

**NEW TRANSCEND
Trainees and Projects**

**Recent Publications
and Congrats!**

IESCC Symposium

**Stem Cell Courses
Offered in Spring
Quarter**

Newly Appointed UCR TRANSCEND Trainees and Their Stem Cell Projects

Predoctoral Trainees

Lu Jin (Mentor: Jin Nam)

- *Develop A Biodegradable Piezoelectric Polymeric Scaffold for Spinal Cord Repair*

Alyssa Treptow (Mentor: Martin Riccomagno)

- *A human organoid system to study the etiology of Cobblestone Lissencephaly.*

Jordan Rolsma (Mentor: Josh Morgan)

- *Development of Tardigrade-Transgenic Human Stem Cells for "On-Demand" Stress Resistance*

Julio Tapia (Mentor: Martin Garcia-Castro)

- *Establishing the Roles of Transmembrane Protein 132C (TMEM132C) in Neural Crest and Melanoma Development*

Prince Okoro (Mentor: Iman Noshadi)

- *A Bioengineered Brain-like Tissue Platform for Neurorepair and Regeneration*

Meijuan Chen (Mentor: Sihem Cheloufi)

- *The Function of Endogenous Retroviruses During Hematopoiesis*

Sanjida Akter (Mentor: Martin Garcia-Castro)

- *Endocannabinoid signaling and human germ layer specification and ectoderm differentiation.*

Jinrui Tan (Mentor: Huinan Liu)

- *Engineering 3D Printed Vasculature on a Microfluidic Device for Scalable Tissue-like Organoids*

Postdoctoral Trainees

Razieh Jaber (Mentor: Viji Santhakumar)

- *Impact of trauma on neural stem cell proliferation and functional maturation*

Vinicius Canale (Mentor: Declan McCole)

- *Regulation of Intestinal Stem Cell Function and Differentiation by the Autoinflammatory Risk Gene, PTPN2.*

Reuben Franklin (Mentor: Sihem Cheloufi)

- *How histone chaperones regulate and maintain stem cell identity*

Yiqing Chen (Mentor: Huinan Liu)

- *Neural Stem Cell-Loaded Biodegradable Spinal Patches for Treating Spinal Cord Contusions*

Recent Publications!

Learn about Stem Cell Research @ UCR

Crawford MS, Ulu A, Ramirez BM, Santos AN, Chatterjee P, Canale V, Manz S, Lei H, Nordgren TM, McCole DF. **Respiratory exposure to agricultural dust extract promotes increased intestinal Tnfa expression, gut barrier dysfunction, and endotoxemia in mice.** Am J Physiol Gastrointest Liver Physiol. 2024;326(1):G3-G15. [LINK](#)

Tai Y, Tonmoy TI, Win S, Brinkley NT, Park BH, Nam J. **Enhanced peripheral nerve regeneration by mechano-electrical stimulation.** NPJ Regen Med. 2023 Oct 17;8(1):57. [LINK](#)

R. Goodrich, Y. Tai, Z. Ye, Y. Yin, J. Nam, **A Magneto-Responsive Hydrogel System for the Dynamic Mechano-Modulation of Stem Cell Niche.** Adv. Funct. Mater. 2023, 33, 2211288. [LINK](#)

Bagdasarian IA, Tonmoy TI, Park BH, Morgan JT (2023) **In vitro formation and extended culture of highly metabolically active and contractile tissues.** PLoS ONE 18(11): e0293609. [LINK](#)

V. Krishnadoss, B. Kanjilal, A. Masoumi, A. Banerjee, I. Dehzangi, A. Pezhouman, R. Ardehali, M. Martins-Green, J. Leijten, I. Noshadi. **Programmable bio-ionic liquid functionalized hydrogels for in situ 3D bioprinting of electronics at the tissue interface.** Materials Today Advances 2023, 17, 100352. [LINK](#)

Phandthong, R., Wong, M., Song, A. et al. **New insights into how popular electronic cigarette aerosols and aerosol constituents affect SARS-CoV-2 infection of human bronchial epithelial cells.** Scientific Reports 13, 5807 (2023). [LINK](#)

Song A, Phandthong R, Talbot P. **Endocytosis inhibitors block SARS-CoV-2 pseudoparticle infection of mink lung epithelium.** Frontiers in Microbiology. 2023 Nov 14;14:1258975. [LINK](#)

Charney RM, Prasad MS, Juan-Sing C, Patel LJ, Hernandez JC, Wu J, Garcia-Castro MI. (2023) **Mowat-Wilson syndrome factor ZEB2 controls early formation of human neural crest through BMP signaling modulation.** Stem Cell Reports. 18(11):2254-2267. [LINK](#)

A Special Congratulations!!

Congratulations to **Dr. Bahman Anvari**, Professor of Bioengineering, who was elected as a Fellow of the National Academy of Inventors.

Inland Empire Stem Cell Consortium Annual Symposium 2023

On November 3rd, 2023, the Annual Symposium was hosted by California University of Science and Medicine (CUSM). Researchers and students from Western University, UCR, UCI, Loma Linda University, CSUSB, City of Hope, and the California University of Science and Medicine came together to share a day of learning, networking, and discussing their latest stem cell research through podium and poster presentations.

Congratulations to the platform and poster presentation winners!

Youyi Tai (Nam lab - UCR)
Shabnam Etemadi (Talbot lab - UCR)
Thomas Spaeter (zur Nieden lab - UCR)
Natasha Brinkley (Nam lab - UCR)
Lorelei Hughes (Kearns-Jonker lab - LLU)
Sneha S Varghese (Dhawan Lab - City of Hope)



Interested in learning more about stem cells?

**Stem Cell Biology and Medicine will be offered in the
Spring Quarter! (CMDB 207)**

This course is open to graduate students from all Inland Empire Stem Cell Consortium campuses and advanced undergraduates.

**IESCC Spring Seminar Series will feature speakers from
around the world! (CMDB 256) Welcome to all via Zoom.**